

AN EASY WAY TO PREPARE AMLA MURABBA WITH HIGH VITAMIN C CONTENT

RP 6

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Table 1. Mean quality aspects in the *murabba* prepared at different sources

Sample of <i>murabba</i>	Appearance	Taste	Texture	Flavour	Blend	Vitamin C (mg/100 g pulp)
Laboratory	8.0	6.7	7.3	3.7	3.6	46.7
Home made	6.9	5.8	6.4	3.8	3.2	23.4
Of market	4.0	5.5	5.6	3.1	3.0	29.7

MURABBA, a whole-fruit candy, is prepared mostly at home by a method involving boiling or pre-treatment with salt, alum or lime to remove astringency. By this method a considerable portion of vitamin C is liable to be destroyed. To reduce the loss of vitamin C, a modified process of preparing *amla murabba* is described.

Amla (*Phyllanthus emblica*) fruit is harvested during September-December. The fruit is eaten raw, and is used for preparing a number of products such as sauce, candy, dried chips, tablets, powder, chutney, pickles and *murabba*. Nutritionally the fruit pulp contains 0.5 per cent protein, 0.1 per cent fat, 0.7 per cent mineral matter, 3.4 per cent fibre, 14.1 per cent carbohydrate, 0.05 per cent calcium, 0.02 per cent phosphorus, 1.2 mg/100 g iron, 0.2 per cent mg/100 g nicotinic acid, 600 mg/100 g vitamin C, and 300 mg/100 g vitamin B.

MATERIALS REQUIRED

Amla ('Banarsi') 1 kg, sugar 1.5 kg, citric acid 2 g, alum 20 g, stainless steel vessels, stainless steel fork and glass-jar.

THE TECHNIQUE

Select healthy fruits without injury and blemishes for the preparation of *murabba*. Dip in cold water for 24 hr. Wipe and prick the fruits with a stainless steel fork. Immerse them in clean water and ensure that they are sufficiently soft. For blanching decant the water and put these fruits in 2 per cent boiling alum solution for 4-5 min

for softening. This treatment is supposed to facilitate the penetration of the syrup, minimize the astringency, inactivate the enzyme and give whiteness to the processed product.

Take a flat-bottomed stainless steel vessel and put 1 layer of these fruits at the bottom and 1 layer of sugar over them. Again place another layer of fruits followed by a sugar layer till all the fruits are used. About half of the total sugar may be used in layers with fruits this way. Now cover the mouth of the vessel with a muslin cloth to prevent entry of insects and dust, and keep it in the sun for 12 hr for equilibrium. A thin syrup will be formed. Take out all the fruits from the vessel to another stainless steel vessel, retaining the sugar syrup in the first one. Concentrate the thin syrup by adding half of the remaining sugar, stirring continuously to avoid charring of sugar during boiling. Now allow the vessel containing the syrup to attain 80°C (15 min after removing the vessel from the fire). Transfer all the fruits from the second vessel to the first vessel containing the syrup. This may be kept in open sun after covering the mouth with muslin cloth for 2 days. The syrup gets diluted again after this

period due to the exudation of water from the fruits. Therefore again concentrate the syrup by adding the remaining sugar to get a final consistency of 70 per cent in this syrup. Then add 2 g citric acid (half teaspoonful) per kilogram fruit, and mix the syrup to avoid crystallization during storage. Test the desired consistency by feeling the syrup between the fingers (when cold it should form 1-2 threads). Now put all the fruits in this lukewarm syrup and store in glass-jar or wide-mouthed glass-bottle (with the lid). The fruits should remain covered in the syrup, otherwise these may become black. Check the consistency again after 8-10 days of storage. If the syrup has become thin, take out the syrup alone by tilting the jar; and boiling it to the required consistency, pour it back into the jar in lukewarm condition.

Maintenance of minimum heat helps in higher retention of vitamin C in the *murabba* without deteriorating the taste and appearance of the processed product.

The *murabba* thus prepared is better than that made at home (using blanching with water) or available in the market (Table 1).